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(54) Title: NOVEL POLYMER AND PRODUCTION OF NANO-POROUS LOW DIELECTRIC POLYMER COMPOSITE FILM USING THE SAME

(57) Abstract: A star-shaped polymer having an alkoxy silane end group and containing an ether group at the center thereof, which is represented by formula (I), is useful as a pore introducer to obtain a low dielectric silicate polymer film having nano-pores distributed regularly and evenly. The star-shaped polymer is prepared by comprising conducting a ring open polymerization of a cyclic monomer and a polyhydric alcohol, and reacting the resulting polymer with an alkoxy silane compound.